Claims

What is claimed is:

1. A method for providing statistical parsing, said method comprising the steps of:

providing a statistical parser, the statistical parser including a statistical model

5   which decodes at least one type of input; and

adapting the statistical model via employing a mathematical transform.

2. The method according to Claim 1, wherein said step of adapting the statistical

model comprises adapting the statistical model via employing a Markov transform.

3. The method according to Claim 2, wherein said step of providing a statistical

10   parser comprises assigning to the statistical model, prior to said adapting step, a

probability mass function.

4. The method according to Claim 3, wherein said step of assigning a probability

mass function comprises writing a probability mass function as a row vector.

5. The method according to Claim 4, wherein said step of adapting the statistical

15   model comprises right-multiplying the row vector by a Markov matrix.

6. The method according to Claim 2, wherein said step of adapting the statistical model comprises choosing a Markov matrix such that the log probability of given material is maximized.

7. The method according to Claim 2, wherein said step of adapting the statistical model comprises unsupervised adaptation.

8. The method according to Claim 7, wherein said step of adapting the statistical model comprises employing decoded parses of test material.

9. The method according to Claim 2, wherein said step of adapting the statistical model comprises supervised adaptation.

10. The method according to Claim 9, wherein said step of adapting the statistical model comprises employing adaptation material.

11. The method according to Claim 2, wherein said step of providing a statistical parser comprises providing a statistical model which decodes linguistic input.

12. The method according to Claim 2, wherein said step of providing a statistical parser comprises providing a statistical model which decodes speech input in speech recognition.

13. An apparatus for providing statistical parsing, said apparatus comprising:

a statistical parser;

said statistical parser including a statistical model which decodes at least one type of input; and

5   an adapter which adapts the statistical model via employing a mathematical transform.

14. The apparatus according to Claim 13, wherein the mathematical transform employed by said adapter comprises a Markov transform.

15. The apparatus according to Claim 14, wherein the statistical model is

10   assigned, prior to adaptation, a probability mass function.

16. The apparatus according to Claim 15, wherein the probability mass function is written as a row vector.

17. The apparatus according to Claim 16, wherein said adapter is configured for right-multiplying the row vector by a Markov matrix.

15   18. The apparatus according to Claim 14, wherein said step adapter is configured for choosing a Markov matrix such that the log probability of given material is maximized.

19. The apparatus according to Claim 14, wherein said adapter is configured to perform unsupervised adaptation.

20. The apparatus according to Claim 19, wherein said adapter is configured to employ decoded parses of test material.

21. The apparatus according to Claim 14, wherein said adapter is configured to perform supervised adaptation.

22. The apparatus according to Claim 21, wherein said adapter is configured to employ adaptation material.

23. The apparatus according to Claim 14, wherein the statistical model decodes linguistic input.

24. The apparatus according to Claim 14, wherein the statistical model decodes speech input in speech recognition.

25. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for providing statistical parsing, said method comprising the steps of:

providing a statistical parser, the statistical parser including a statistical model which decodes at least one type of input; and

adapting the statistical model via employing a mathematical transform.